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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/765,368      | 01/22/2001  | Michio Ono           | Q62757              | 8600             |

7590 06/27/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
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Washington, DC 20037

| EXAMINER |
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ANDERSON, REBECCA L

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1626

DATE MAILED: 06/27/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/765,368

Applicant(s)

ONO ET AL.

Examiner

Rebecca L Anderson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 9-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1,2 and 4-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 8.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

Claims 1-14 are currently pending in the instant application. Claims 3 and 9-14 are withdrawn from further consideration as being drawn to non-elected subject matter. Claims 1-2 and 4-8 are objected. Claim 1 was amended in the amendment filed 7 April 2003.

### *Election/Restrictions*

The subject matter of claims 1, 2 and 4-8 other than that wherein:

The polymerizable molten salt monomer of the general formula (I) wherein:

$n, m, X^+$ , is as found in claim 1,

$Q$  is imidazole,

$Y_1$  is a bonding hand or  $CH_2O$ ,

$Y_2$  is a substituted or unsubstituted alkyl group with the proviso that at least one of  $Y_2$ 's

has the substituent  $-Y_3-C(=O)-C(R_2)=CH_2$ ,

$R_2$  is hydrogen or alkyl and

$Y_3$  is oxygen.

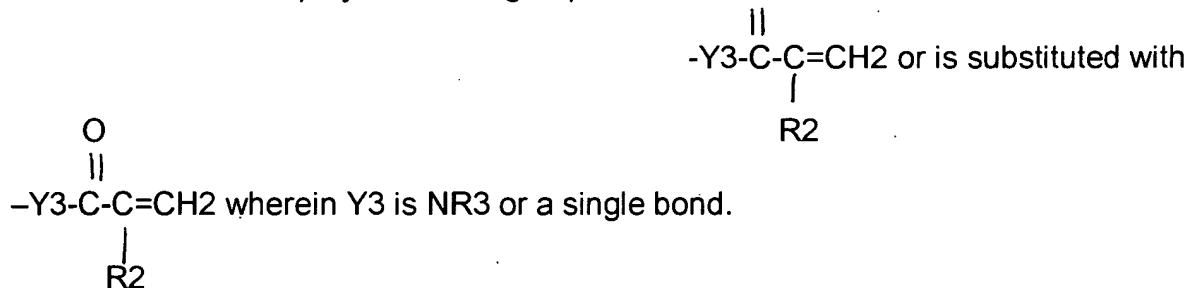
It is noted that this generic concept is equivalent to the generic concept as found in the non-final office action mailed 7 November 2002 but has been rewritten to correspond to the variables as found in applicant's amended claim 1.

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The remaining subject matter of claims 1-2 and 4-8 that is not drawn to the above elected invention and the subject matter of claims 3 and 9-14 stands withdrawn, 37 CFR 1.142 (b), as being for non-elected inventions. The withdrawn subject matter of the claims is properly restricted as said subject matter differs materially in structure and element from the elected subject matter so as to be patentably distinct, i.e. a reference which anticipated but the elected subject matter would not even render obvious the non-elected subject matter. Additionally, the fields of search are not co-extensive.

The remaining compounds of claims 1-8 which are not within the generic concept, which are independent and distinct from the generic concept and do not have unity with the species elected and therefore are withdrawn by means of a restriction requirement within the claims are, for example, the compounds wherein:

Q is a pyrazole (claim 3), Y1 is any divalent group except CH<sub>2</sub>O, such as -CH<sub>2</sub>-, -CO-, -O-, -S-, -NR<sub>4</sub>- or any combination of these divalent groups except CH<sub>2</sub>O and Y2 is substituted with a polymerizable group other than O



Some specific species of the withdrawn compounds are the species of examples F-12a, F12b, F13a, F13 b, F14a, F14b (page 25), which contains the pyrazole as Q and the species of examples F15a, F15b, F16a, F16b, F17a, F17b (page

26), which contains polymerizable groups other than the one mentioned above in the generic concept, etc.

The above mentioned withdrawn compounds which are withdrawn from consideration as being for non elected subject matter differ materially in structure and composition from the compounds of the elected invention. The withdrawn compounds contain varying functional groups which differ from those of the elected invention such as pyrazole, amino nitrogen containing, non-heterocyclic aromatic rings, etc. which are chemically recognized to differ in structure and function. This recognized chemical diversity of the functional groups can be seen by the various classification of these functional groups in the U.S. classification system, i.e., class 546 subclasses 184(+) (pyrazole), class 564 subclass 1(+) (amino nitrogen containing), etc. Therefore, again, the compounds which are withdrawn from consideration as being for non elected subject matter differ materially in structure and composition and have been restricted properly as a reference which anticipated but the elected subject matter would not even render obvious the non-elected subject matter. Nowhere do applicants argue to the contrary. Nowhere do applicants point out and give reasons why the claims do not involve independent or distinct subject matter.

These withdrawn compounds are independent and distinct from the elected invention and do not have unity with the species elected and are therefore withdrawn by means of a restriction requirement within the claims.

The subject matter of claims 9-14 which is not within the generic concept, which is independent and distinct from the generic concept and does not have unity with the

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species elected and therefore is withdrawn by means of a restriction requirement is the electrolyte composition containing a polymer compound obtained by polymerizing a polymerizable molten salt monomer according to claim 1, an electrochemical cell containing an electrolyte composition according to claim 9, a photoelectrochemical cell comprising a charge-transferring layer containing an electrolyte composition according to claim 9 and a nonaqueous secondary cell containing an electrolyte composition according to claim 9.

Accordingly, the claims are drawn to more than a single invention and restriction as has been required is proper, repeated and made final.

### ***Response to Arguments***

Applicant's arguments filed 7 April 2003 have been fully considered but they are not persuasive. Applicant argues that the polymerizable molten salt monomer represented by formula (I) as recited in amended claim 1 is appropriate rather than the generic concept identified by the Examiner because the applicants have found that in the monomer of the present invention, the nitrogen-containing aromatic heterocyclic atomic group represented by Z and the polyethyleneoxy structure, are particularly important for exerting the effects of the invention and that no particular restriction is imposed on the groups Y1 or Y2, so it is therefore unreasonable to limit the interlocking group to only one species of Y1 or to limit the polymerizable substituent group on Y2.

Applicant's arguments are not persuasive because:

Firstly, it is pointed out that the restriction requirement is made under 35 U.S.C. 121. 35 U.S.C. 121 gives the Commissioner (Director) the authority to limit the

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examination of an application where two or more independent and distinct inventions are claimed to only one invention. The examiner has indicated that more than one independent and distinct invention is claimed in this application and has restricted (limited) claimed subject matter accordingly. Thus the requirement to restrict the claims in this application is predicated on the fact that the claimed subject matter involves more than one independent and distinct invention. Nowhere do applicants argue to the contrary. Nowhere do applicants point out and give reasons why the claims do not involve independent or distinct subject matter. Rather, applicant has argued that novelty exists in the heterocyclic atomic group and the polyethyleneoxy structure, which does not address the premise of the restriction requirement, that there are two or more independent and distinct inventions claimed. So, here we have claims, which involve more than one independent or distinct invention. Under 35 U.S.C. 121, the claims may be restricted and the examination limited to a restricted invention. There is no argument or evidence to the contrary. Therefore, Applicants' arguments of the restriction requirement have been considered but are not found persuasive. Applicants argue that the examiners recasting of the claims to the generic concept improperly limits the scope of Applicants claims. However, the generic concept does not improperly limit the scope of Applicants claims. Applicants' claims involve more than one independent or distinct invention. Under 35 U.S.C. 121, the claims may be restricted and the examination limited to a restricted invention.

***Claim Objections***

Claims 1, 2 and 4-8 are objected to as containing non-elected subject matter. The claims presented drawn solely to the elected subject matter as indicated supra, would appear allowable over the prior art of record.

**Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rebecca L. Anderson whose telephone number is (703) 605-1157. Mrs. Anderson can normally be reached Monday through Friday 7:00AM to 3:30PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Joseph McKane, can be reached at (703) 308-4537.



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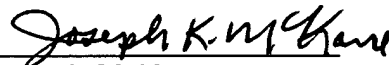
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone numbers are (703) 308-1235 and (703) 308-0196.

A facsimile center has been established. The hours of operation are Monday through Friday, 8:45AM to 4:45PM. The telecopier numbers for accessing the facsimile machine are (703) 308-4242, (703) 305-3592, and (703) 305-3014.



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